



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,453	09/10/2003	Serkan M. Kutan	221452	1834
45979	7590	05/24/2006	EXAMINER	
PERKINS COIE LLP/MSFT			ASSESSOR, BRIAN J	
P. O. BOX 1247			ART UNIT	
SEATTLE, WA 98111-1247			PAPER NUMBER	

2114

DATE MAILED: 05/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/659,453

Applicant(s)

KUTAN ET AL.

Examiner

Brian J. Assessor

Art Unit

2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 15-23 and 25-34 is/are allowed.
- 6) ☐ Claim(s) 1-5, 8-14, 24, and 35-51 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/10/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/10/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 14, 24, 35, 39, and 42-49 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In page 3, paragraph 0028 of the specification the term computer readable medium is defined to include communications media. Signals and other forms of communication mediums are considered forms of energy and therefore are not statutory under 35 USC 101. Proper correction required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 8, 9, 12, 14, and 47-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Fischer (5,889,772).

Art Unit: 2114

As per claim 1, Fischer teaches:

In a computing system, a method for performing a procedure in the presence of possible failure, the procedure specifying a plurality of states including an initial state and a final state, the procedure further specifying a plurality of transitions between the states, the procedure further specifying an order of the transitions and of the states, the method comprising:

monitoring for failures; (Fischer column 9, lines 17-22)

initializing the procedure at the initial state; (Fischer figure 7, element 302; the first transmission state)

performing the procedure by executing transitions from one state to another state according to the specified order until either the final state is reached or until a failure is detected in a transition; (Fischer column 9, lines 39-49)

wherein if a failure is detected in a transition, then:

transitioning to a recovery coordination state; (Fischer figure 7, elements 318 and 324; when no ACK is received it is determined that the transmission failed and values are changed before returning to the transmission state.)

transitioning from the recovery coordination state to the initial state; (Fischer figure 7, elements 318 and 324; once the recovery values are changed the state is transferred to the transmission state.)

re-visiting transitions from one state to another state according to the specified order until either the failed transition is reached or until a further failure is detected in a transition; (Fischer figure 7; the states are repeated until

Art Unit: 2114

all transmissions are complete, when a failed transmission occurs it is dealt with and then returns to the first transmission state.)

if the failed transition is reached without further failure, then executing transitions from one state to another state according to the specified order from the failed transition until either the final state is reached or until a further failure is detected in a transition. (Fischer figure 7; the states are repeated until all transmissions are complete, when a failed transmission occurs it is dealt with and then returns to the first transmission state.)

As per claim 2, Fischer teaches:

The method of claim 1 wherein the computing system comprises a first computing device;

wherein the transitions specified by the procedure are all performed on the first computing device. (Fischer column 7, lines 33-40; it can be incorporated in a local or distributed architecture.)

As per claim 3, Fischer teaches:

The method of claim 1 wherein the computing system comprises a plurality of computing devices;

wherein at least one transition specified by the procedure is executed on a first computing device; and

Art Unit: 2114

wherein at least one other transition specified by the procedure is executed on a second computing device. (Fischer column 7, lines 33-40; it can be incorporated in a local of distributed architecture.)

As per claim 4, Fischer teaches:

The method of claim 3 wherein the procedure moves a resource from the first computing device to the second computing device. (Fischer column 4, lines 39-49; the process is transferring frames from one system to another)

As per claim 8, Fischer teaches:

The method of claim 1 wherein each transition specified by the procedure is idempotent. (Fischer figure 7; inherently the process by Fischer is designed to repeat without creating errors.)

As per claim 9, Fischer teaches:

The method of claim 1 wherein at least one state specified by the procedure specifies a plurality of sub states and transitions between the sub states. (Fischer figure 7; each step would include multiple sub states.)

As per claim 12, Fischer teaches:

The method of claim 1 wherein, for at least one transition before the failed transition, re-visiting the transition comprises re-executing the transition. (Fischer column 10, lines 36-38; after the recovery state the frame is queued for retransmission.)

Claim 14 is a computer readable medium claim corresponding to the method claim 1. Therefore claim 14 is rejected for the same rationale set forth in claim 1.

As per claim 47, Fischer teaches:

A computer-readable medium containing a procedure data structure, the procedure data structure comprising:

a first data field containing data representing a plurality of states of a procedure, the plurality of states comprising an initial state and a final state; (Fischer figure 7; all the states must be saved in a data field in order to operate.)

a second data field containing data representing a plurality of transitions between the states of the procedure; (Fischer figure 7; all the transitions from state to state must be saved in a data field in order to operate.)

a third data field containing data representing an order of the transitions and of the states of the procedure; (Fischer figure 7; all the states and order of the states must be saved in a data field in order to operate.)

a fourth data field containing data representing a recovery coordination state; (Fischer figure 7, elements 318 and 324; when no ACK is received it is determined that

Art Unit: 2114

the transmission failed and values are changed before returning to the transmission state.)

a fifth data field containing data representing a failed transition of the procedure. (Fischer column 9, lines 39-49; the failure information is stored and modified in a data field.)

As per claim 48, Fischer teaches:

The computer-readable medium of claim 47 wherein each of the plurality of transitions is idempotent. (Fischer figure 7; inherently the process by Fischer is designed to repeat without creating errors.)

As per claim 49, Fischer teaches:

The computer-readable medium of claim 47 wherein at least one of the plurality of states comprises a plurality of sub states and transitions between the substrates. (Fischer figure 7; each step would include multiple sub states.)

Claims 36, 37, 39-42 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Kitamura (6,247,012).

As per claim 36, Kitamura clearly teaches:

In a computing system comprising a first resource server and a second resource server, the first resource server comprising a moveaway flag, a method for the first

Art Unit: 2114

resource server to move a resource to the second resource server, the method comprising the following elements:

setting the first resource server's moveaway flag to FALSE; (Kitamura column 10, lines 24-30; the flag is false until the server changes it to allow the item to be transferred.)

setting the first resource server's moveaway flag to TRUE; (Kitamura column 10, lines 24-30; this flag is enabled when it is allowed to be transferred.)

copying the resource from the first resource server to the second resource server. (Kitamura column 4, lines 14-19; the system is used to transfer files back and forth from the resource server.)

As per claim 37, Kitamura clearly teaches:

The method of claim 36 wherein the elements of the method are idempotent operations. (Kitamura, inherently teaches idempotent operations as the system can be used over and over without occurrence of an error.)

Claim 39 is a computer readable medium claim corresponding to the system claim 36. Therefore claim 39 is rejected for the same rationale set forth in claim 39.

As per claim 40, Kitamura clearly teaches:

In a computing system comprising a first resource server and a second resource server, the second resource server comprising a moveaway flag, a method for the

Art Unit: 2114

second resource server to receive a resource from the first resource server, the method comprising the following elements:

receiving the resource from the first resource server; (Kitamura column 10, lines 30-36; files are uploaded to the server when the flag is enabled.)

setting the second resource server's moveaway flag to FALSE. (Kitamura column 10, lines 30-36; once files are uploaded the upload flag can be set to disabled in order to protect the file.)

As per claim 41, Kitamura clearly teaches:

The method of claim 40 wherein the elements of the method are idempotent operations. (Kitamura, inherently teaches idempotent operations as the system can be used over and over without occurrence of an error.)

Claim 42 is a computer readable medium claim corresponding to the system claim 40. Therefore claim 42 is rejected for the same rationale set forth in claim 40.

As per claim 46, Kitamura clearly teaches:

A computer-readable medium containing a resource movement data structure, the resource movement data structure comprising:

a first data field containing data representing a Boolean moveaway flag;

(Kitamura column 10, lines 24-30)

Art Unit: 2114

a second data field containing data representing a resource. (Kitamura figure 7, element "content name")

Claim 43 is rejected under 35 U.S.C. 102(b) as being anticipated by Fenner (5,842,224).

As per claim 43, Fenner teaches:

A computer-readable medium containing a resource movement data structure, the resource movement data structure comprising:

a first data field containing data representing a current resource server flag; (Fenner figure 4, element 128)

a second data field containing data representing a target resource server flag. (Fenner figure 4, element 126)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer (5,889,772) in view of Kara (6,199,055).

As per claim 5:

Fischer does not explicitly disclose a method wherein each of the first and the second computing devices comprises a moveaway flag.

In column 10, lines 7-11; Kara clearly teaches a method where the first and second computing devices have "moveaway" flags. The moveaway flag as described in the specification is an indication on whether or not the transmission is complete or not, which is taught by Kara. It would have been obvious to a person skilled in the art at the time of invention to include the transmission flag as taught by Kara in order to keep track of when a transmission starts and completes. This would have been obvious because Kara clearly teaches that the above process is better suited for creating an improved way for tracking information on transactions. (Kara column 2, lines 52-57)

As per claim 10:

Fischer does not explicitly disclose a method wherein transitioning to a recovery coordination state comprises generating an error message.

In column 24, line 65 – column 25, line 4; Kara clearly discloses a method, which generates an error message when an failure in the transmission occurs and steps toward recovery are taken. This method informs a remote system when a failure occurs during a transmission. It would have been obvious to a person skilled in the art at the time of invention to include the error message method as taught by Kara in order to

Art Unit: 2114

keep the user informed on the status of all transmissions. This would have been obvious because Kara clearly teaches that the above method is better suited for keeping information on transactions. (Kara column 2, lines 52-57)

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer (5,889,772) in view of Webber (6,965,571).

As per claim 11:

Fischer fails to explicitly disclose a method which for at least one transition before the failed transition, re-visiting the transition comprises skipping the transition.

In column 3, lines 40-46; Webber clearly discloses a method where when a problem occurs during the transmission of packets the transactions may be redone or skipped. It would have been obvious to a person skilled in the art at the time of invention to include the retransmission method as taught by Webber in order to reduce redundant operations. This would have been obvious because Webber clearly teaches that the above method would have been better suited for ensuring efficient data transmission and better error correction. (Webber column 1, lines 5-7)

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer (5,889,772) in view of Allen (4,663,706).

As per claim 13:

Fischer fails to explicitly disclose a method wherein re-executing the transition comprises receiving an error message that the transition has already been performed.

In column 13, lines 46-57; Allen clearly discloses a system which during retransmission will issue an error message when an transition has already been performed.

It would have been obvious to a person of ordinary skill in the art at the time of invention to use the system as taught by Allen and recognize this method as common to the art during retransmission in order to prevent redundant operations. This would have been obvious because Allen clearly teaches that the above method is better suited for handling retransmissions or redo actions and increase the speed and throughput of transmissions. (Allen column 1, lines 33-42)

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura (6,247,012) in view of Shiraga (20040083276).

As per claim 38:

Kitamura fails to explicitly disclose a method that deletes the resource from the first resource server.

In page 2, paragraph 0034; Shiraga clearly discloses a method in which it is possible to delete the transmitted data from the original source once the transfer is completed.

Art Unit: 2114

It would have been obvious to a person skilled in the art at the time of invention to include the system as taught by Shiraga in order to reduced used memory. This would have been obvious because Shiraga clearly teaches the above process is better suited for the transmission of files and data over a network. (Shiraga page 1, paragraph 0007)

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fenner (5,842,224) in view of Fischer (5,889,772).

As per claim 44:

Fenner fails to explicitly disclose a method wherein a third data field containing data indicating a failed element of a resource movement method.

In column 10, lines 25-31; Fischer clearly discloses a method where all errors are kept track of within the failed attempts data fields.

It would have been obvious to a person skilled in the art at the time of invention to include the method as taught by Fischer in order to improve the error tracking and record keeping of the transmission system. This would have been obvious because Fischer clearly teaches that the above method is better suited for handling errors during a transmission and increase the throughput of the system. (Fischer column 4, lines 20-27)

Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fenner (5,842,224) in view of Kitamura (6,247,012).

As per claim 45:

Fenner does not explicitly disclose a method wherein a third data field containing data representing a Boolean moveaway flag and a fourth data field containing data representing a resource.

In column 10, lines 24-30; Kitamura clearly discloses a method wherein a data field is present which contains a "moveaway" flag. Also in figure 7, element "content name"; Kitamura clearly discloses a method which includes a data field for the data representing a resource.

It would have been obvious to one of ordinary skill in the art at the time of invention to include the method as taught by Kitamura in order to improve the transmission of files between two computer systems. This would have been obvious because Kitamura clearly teaches a more expedient and efficient way to handle transmissions of material from one server to another. (Kitamura column 3, lines 52-56)

Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fenner (5,842,224) in view of Kara (6,199,055).

As per claim 50:

A directory server comprising a current resource server flag and a target resource server flag; (Fenner figure 4, elements 126 and 128)

Fenner does not explicitly disclose a method wherein each of the first and the second computing devices comprises a moveaway flag.

In column 10, lines 7-11; Kara clearly teaches a method where the first and second computing devices have "moveaway" flags. The moveaway flag as described in the specification is an indication on whether or not the transmission is complete or not, which is taught by Kara. It would have been obvious to a person skilled in the art at the time of invention to include the transmission flag as taught by Kara in order to keep track of when a transmission starts and completes. This would have been obvious because Kara clearly teaches that the above process is better suited for creating an improved way for tracking information on transactions. (Kara column 2, lines 52-57)

Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fenner (5,842,224) in view of Kara (6,199,055) in further view of Kitamura (6,247,012).

As per claim 51:

Fenner and Kara fail to explicitly disclose a system wherein the directory server and the first resource server are the same server.

In column 10, lines 21-23; Kitamura clearly discloses a system where the resource server and the directory server are the same server. It would have been

obvious to a person skilled in the art at the time of invention to include the system as taught by Kitamura in order to simplify the computer system. This would have been obvious because Kitamura clearly teaches that the above method is better suited for expediting the transfer of information between two sources. (Kitamura column 3, lines 52-56)

Allowable Subject Matter

Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 15-23 25-34 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 6 and 7 are allowable for the following reasons. Claim 6 is allowable in view of the inherited elements in claims 1 and 3, along with the additional elements of claim 6. Specifically, the process of having the target resource and the current resource flags atomically. This in combination with all the included elements of the rest of claims 1, 3, and 6, create grounds for claim 6 to be allowable. Claim 7 is allowable through dependency on claim 6.

Claims 15-35 are allowable for the following reasons. Claim 15 is allowable for having the specific configuration of all the flags and the process of setting and clearing

Art Unit: 2114

the flags in the order claimed. Claims 16-23 are allowable through dependency on claim 15. Claims 25-34 respectively are computer system claims corresponding to claims 15-23. Therefore claim 25-34 are allowable for the same rationale set forth in claims 15-23.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Assessor whose telephone number is (571) 272-0825. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571)272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/659,453
Art Unit: 2114

Page 19

BA

A handwritten signature in black ink, appearing to be 'SB', with a long horizontal stroke extending to the right.

SCOTT BADERMAN
SUPERVISORY PATENT EXAMINER